UNITED STATES PATENT AND TRADEMARK OFFICE

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/466,925	12/20/1999	KENICHI KOKUBO	99N034-US	1740

21254   7590   10/06/2004

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EXAMINER
HA, LEYNNA A

ART UNIT	PAPER NUMBER
2135	

DATE MAILED: 10/06/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE <u>3</u> MONTH(S) FROM
THE MAILING DATE OF THIS COMMUNICATION.
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed
  after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
  Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any
  earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☐ Responsive to communication(s) filed on _____ .

2a)☐ This action is **FINAL**.   2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is
closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-12* is/are pending in the application.

    4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-12* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a)☒ All /b)☐ Some * c)☐ None of:

      1.☒ Certified copies of the priority documents have been received.

      2.☐ Certified copies of the priority documents have been received in Application No. _____ .

      3.☐ Copies of the certified copies of the priority documents have been received in this National Stage
application from the International Bureau (PCT Rule 17.2(a)).

    * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1)☒ Notice of References Cited (PTO-892)

2)☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3)☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
    Paper No(s)/Mail Date _____ .

4)☐ Interview Summary (PTO-413)
    Paper No(s)/Mail Date. _____ .

5)☐ Notice of Informal Patent Application (PTO-152)

6)☐ Other: _____ .

DETAILED ACTION

1.   Claims 1-20 have been re-examined and are rejected under 35 U.S.C.

103(a). This is a NON-Final rejection.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all

obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

2.   **Claims 1-20 are rejected under 35 U.S.C. 103(a) as being**

unpatentable over Kleijne, Et al. (US 4,691,350).

As per claim 1:

Kleijne, Et al. discloses a data storage device comprising:

storage means, installed in a housing, for storing predetermined

confidential data; **[see col.2, lines 13-17]**

data generation means comprising two electrodes disposed on said

housing for generating data representing deflection of said housing in which

said storage means is installed; and **[see col.10, lines 32-62]**

detection means for detecting physical impact applied to said housing in accordance with the data generated by said data generation means. **[see col.10, lines 25-32]**

[Kleijne discloses having six plates forming the housing (col.4, lines 17-19) wherein the conductive path segments and the conductive sheet are superimposed on the inner surface of the plate (col.4, lines 32-34). Kleijne fails to explicitly discuss having two electrodes disposed on said housing. However, it is obvious to include two if not more electrodes on the housing such that the electrode is on each side of the housing can sense when there is an intrusion or deflection of the housing. It is also obvious the housing or the encasing alone is not able to detect or sense any intrusion so it is necessary to have a sensing or electrode conducting material superimposed onto the encasing to form the "house". It would have been obvious of ordinary skill in the art for Kleijne to have (two or more) electrodes disposed on the housing in order to sense or detect when there is an intrusion or some sort of deflection involving the encasing (sides) of the housing (col.6, line 67 – col.7, line 4).]

As per claim 2:

Kleijne, Et al. discloses a data storage device comprising:

storage means, installed in a housing, for storing predetermined confidential data; **[see col.2, lines 13-17 and col.9, lines 26-28]**

data generation means comprising two electrodes disposed on said housing for generating data representing deflection of said housing in which said storage means is installed; **[see col.10, lines 32-62]**

detection means for detecting physical impact applied to said housing by specifying the deflection of said housing in accordance with the data generated by said data generation means; and **[see col.10, lines 25-32]**

data cancel means for canceling the confidential data stored in said storage means when said detection means detects physical impact applied to said housing. **[see col.10, lines 13-24]**

wherein said data representing deflection of said housing represents a change of capacitance between two electrodes that are disposed on said housing. **[see col.10, lines 25-42]**

[Kleijne discloses having six plates forming the housing (col.4, lines 17-19) wherein the conductive path segments and the conductive sheet are superimposed on the inner surface of the plate (col.4, lines 32-34). Kleijne fails to explicitly discuss having two electrodes disposed on said housing. However, it is obvious to include two if not more electrodes on the housing such that the electrode is on each side of the housing can sense when there is an intrusion or deflection of the housing. It is also obvious the housing or the encasing alone is not able to detect or sense any intrusion so it is necessary to have a sensing or electrode conducting material superimposed onto the encasing to form the "house". It would

have been obvious of ordinary skill in the art for Kleijne to have (two or more) electrodes disposed on the housing in order to sense or detect when there is an intrusion or some sort of deflection involving the encasing (sides) of the housing (col.6, line 67 – col.7, line 4).]

As per claim 3:

Kleijne, Et al. discloses a data storage device according to claim 1, further comprising:

measure means for a measuring temperature in said housing in which said storage means is installed; and **[see col.10, lines 51-63]**

correction means for correcting the data generated by said data generation means in accordance with the temperature measured by said measure means, **[see col.11, lines 45-col.12, line 3]**

wherein said detection means detects the physical impact applied to said housing in accordance with the data representing the deflection after the correction by said correction means. **[see col.12, line 18-29]**

As per claim 4:

Kleijne, Et al. discloses a data storage device according to claim 2, further comprising:

measure means for measuring a temperature in said housing in which said storage means is installed; and **[see col.10, lines 51-63]**

correction means for correcting the data generated by said data generation means in accordance with the temperature measured by said measure means, **[see col.11, lines 45 - col.12, line 3]**

wherein said detection means detects the physical impact applied to said housing in accordance with the data representing the deflection after the correction by said correction means. **[see col.12, line 18-29]**

As per claim 5:

Kleijne, Et al. discloses a data storage device comprising:

a memory, installed in a housing having predetermined shape, for storing predetermined confidential data; **[see col.2, lines 13-17 and col.9, lines 26-28]**

a plurality of electrodes disposed on, arranged in said housing in which said memory is installed, for generating predetermined capacitance; and **[see col.11-col.12]**

a detection processor for detecting physical impact applied to said housing in accordance with a shift of degrees of the capacitance between said electrodes. **[see col.11, lines 45-67 and col.12, line 18-29]**

[Kleijne discloses having six plates forming the housing (col.4, lines 17-19) wherein the conductive path segments and the conductive sheet are superimposed on the inner surface of the plate (col.4, lines 32-34). Kleijne fails to explicitly discuss having two electrodes disposed on said housing. However, it is obvious to include two if not more electrodes on the housing such that the electrode is on each side of the housing can

sense when there is an intrusion or deflection of the housing. It is also obvious the housing or the encasing alone is not able to detect or sense any intrusion so it is necessary to have a sensing or electrode conducting material superimposed onto the encasing to form the "house". It would have been obvious of ordinary skill in the art for Kleijne to have (two or more) electrodes disposed on the housing in order to sense or detect when there is an intrusion or some sort of deflection involving the encasing (sides) of the housing (col.6, line 67 – col.7, line 4).]

As per claim 6:

Kleijne, Et al. discloses a data storage device comprising:

a memory, installed in a housing having predetermined shape, for storing predetermined confidential data; **[see col.2, lines 13-17 and col.9, lines 26-28]**

a plurality of electrodes disposed on said housing in which said memory is installed, for generating a predetermined capacitance; **[see col.11-col.12]**

a detection processor which specifies deflection of said housing in accordance with a shift of degrees of the capacitance between said electrodes to detect physical impact applied to said housing; and **[see col.11, lines 45-67 and col.12, line 18-29]**

a data canceler which cancels the confidential data stored in said memory when said detection processor detects the physical impact applied to said housing. **[see col.10, lines 13-24 and col.13, lines 20-25]**

[Kleijne discloses having six plates forming the housing (col.4, lines 17-19) wherein the conductive path segments and the conductive sheet are superimposed on the inner surface of the plate (col.4, lines 32-34). Kleijne fails to explicitly discuss having two electrodes disposed on said housing. However, it is obvious to include two if not more electrodes on the housing such that the electrode is on each side of the housing can sense when there is an intrusion or deflection of the housing. It is also obvious the housing or the encasing alone is not able to detect or sense any intrusion so it is necessary to have a sensing or electrode conducting material superimposed onto the encasing to form the "house". It would have been obvious of ordinary skill in the art for Kleijne to have (two or more) electrodes disposed on the housing in order to sense or detect when there is an intrusion or some sort of deflection involving the encasing (sides) of the housing (col.6, line 67 – col.7, line 4).]

As per claim 7:

Kleijne, Et al. discloses a data storage device according to claim 5, further comprising:

a thermo-sensor which measure a temperature in said housing in which said memory in installed; and **[see col.10, lines 51-63]**

a correction processor which corrects the shift of degrees of the capacitance between said electrodes in accordance with the temperature measured by said thermo-sensor, **[see col.11, lines 45 - col.12, line 3]**

wherein said detection processor detects the physical impact applied to said housing in accordance with the deflection of said housing after the correction by said correction processor. **[see col.10, lines 25-63 and col.12, line 20 – col.13, line 2]**

As per claim 8:

Kleijne, Et al. discloses a data storage device according to claim 6, further comprising:

a thermo-sensor which measure temperature in said housing in which said memory in installed; and **[see col.10, lines 43-64]**

a correction processor which corrects the shift of degrees of the capacitance between said electrodes in accordance with the temperature measured by said thermo-sensor, **[see col.11, lines 45 - col.12, line 3]**

wherein said detection processor detects the physical impact applied to said housing in accordance with the deflection of said housing after the correction by said correction processor. **[see col.10, lines 25-63 and col.12, line 20 – col.13, line 2]**

As per claim 9:

Kleijne, Et al. discloses a detection method comprising:

generating data representing deflection of a housing in which a storage device for storing predetermined confidential data is installed; and **[see col.2, lines 13-17 and col.9, lines 26-28]**

detecting physical impact applied to said housing in accordance with the data generated by said generating data. **[see col.9, lines 8-col.10, line 42]**

wherein said data representing deflection of said housing represents a change of capacitance between two electrodes that are disposed on said housing. **[see col.10, lines 25-42]**

[Kleijne discloses having six plates forming the housing (col.4, lines 17-19) wherein the conductive path segments and the conductive sheet are superimposed on the inner surface of the plate (col.4, lines 32-34). Kleijne fails to explicitly discuss having two electrodes disposed on said housing. However, it is obvious to include two if not more electrodes on the housing such that the electrode is on each side of the housing can sense when there is an intrusion or deflection of the housing. It is also obvious the housing or the encasing alone is not able to detect or sense any intrusion so it is necessary to have a sensing or electrode conducting material superimposed onto the encasing to form the "house". It would have been obvious of ordinary skill in the art for Kleijne to have (two or more) electrodes disposed on the housing in order to sense or detect when there is an intrusion or some sort of deflection involving the encasing (sides) of the housing (col.6, line 67 – col.7, line 4).]

As per claim 10:

Kleijne, Et al. discloses a detection method comprising:

generating data representing deflection of a housing in which a storage device for storing predetermined confidential data is installed; **[see col.9, lines 8-col.10, line 42]**

measuring temperature in said housing in which said storage device is correcting data generated by said generating data in accordance with the temperature measured by said measuring temperature; and **[see col.10, lines 43-64]**

detecting physical impact applied to said housing by specifying the deflection of said housing in accordance with the data representing the deflection of said housing after correction by said correcting data. **[see col.10, lines 25-63 and col.12, line 20 – col.13, line 2]**

wherein said data representing deflection of said housing represents a change of capacitance between two electrodes that are disposed on said housing. **[see col.10, lines 25-42]**

[Kleijne discloses having six plates forming the housing (col.4, lines 17-19) wherein the conductive path segments and the conductive sheet are superimposed on the inner surface of the plate (col.4, lines 32-34). Kleijne fails to explicitly discuss having two electrodes disposed on said housing. However, it is obvious to include two if not more electrodes on the housing such that the electrode is on each side of the housing can

sense when there is an intrusion or deflection of the housing. It is also

obvious the housing or the encasing alone is not able to detect or sense

any intrusion so it is necessary to have a sensing or electrode conducting

material superimposed onto the encasing to form the "house". It would

have been obvious of ordinary skill in the art for Kleijne to have (two or

more) electrodes disposed on the housing in order to sense or detect when

there is an intrusion or some sort of deflection involving the encasing

(sides) of the housing (col.6, line 67 – col.7, line 4).]

As per claim 11:

Kleijne, Et al. discloses a detection method comprising:

measuring the capacitance between a plurality of electrodes disposed on

a housing in which a memory for storing predetermined confidential data is

installed; and **[see col.11-col.12]**

detecting physical impact applied to said housing in accordance with a

shift of degrees of the. **[see col.10, lines 25-63]**

[Kleijne discloses having six plates forming the housing (col.4, lines 17-

19) wherein the conductive path segments and the conductive sheet are

superimposed on the inner surface of the plate (col.4, lines 32-34).

Kleijne fails to explicitly discuss having two electrodes disposed on said

housing. However, it is obvious to include two if not more electrodes on

the housing such that the electrode is on each side of the housing can

sense when there is an intrusion or deflection of the housing. It is also

obvious the housing or the encasing alone is not able to detect or sense

any intrusion so it is necessary to have a sensing or electrode conducting

material superimposed onto the encasing to form the "house".   It would

have been obvious of ordinary skill in the art for Kleijne to have (two or

more) electrodes disposed on the housing in order to sense or detect when

there is an intrusion or some sort of deflection involving the encasing

(sides) of the housing (col.6, line 67 – col.7, line 4).]

As per claim 12:

Kleijne, Et al. discloses a detection method comprising:

measuring a capacitance between a plurality of electrodes dispose on a

housing in which a memory for storing predetermined confidential data is

installed;   **[see col.11-col.12]**

measuring a temperature in said housing in which said memory is

installed; **[see col.10, lines 43-64]**

correcting the measured capacitance in accordance with measured the

temperature; and **[see col.11, lines 45 - col.12, line 3]**

detecting physical impact applied to said housing by specifying the

deflection of said housing in accordance with shift degrees of the capacitance

after the correction. **[see col.10, lines 25-63 and col.12, line 20 – col.13, line 2]**

[Kleijne discloses having six plates forming the housing (col.4, lines 17-

19) wherein the conductive path segments and the conductive sheet are

superimposed on the inner surface of the plate (col.4, lines 32-34).

Kleijne fails to explicitly discuss having two electrodes disposed on said housing. However, it is obvious to include two if not more electrodes on the housing such that the electrode is on each side of the housing can sense when there is an intrusion or deflection of the housing. It is also obvious the housing or the encasing alone is not able to detect or sense any intrusion so it is necessary to have a sensing or electrode conducting material superimposed onto the encasing to form the "house". It would have been obvious of ordinary skill in the art for Kleijne to have (two or more) electrodes disposed on the housing in order to sense or detect when there is an intrusion or some sort of deflection involving the encasing (sides) of the housing (col.6, line 67 – col.7, line 4).]

As per claim 13:

Kleijne, Et al. discloses a data storage device comprising:

a data storage in a housing; **[see col.9, lines 13-28]**

a plurality of electrodes disposed on said housing **[see col.3, lines 22-66]**

a processor that determines a deflection of said housing based upon a capacitance between the plurality of electrodes. **[see col.10, lines 13-67 and col.11, line 45 – col.12, line 16]**

[Kleijne discloses having six plates forming the housing (col.4, lines 17-19) wherein the conductive path segments and the conductive sheet are superimposed on the inner surface of the plate (col.4, lines 32-34). Kleijne fails to explicitly discuss having two electrodes disposed on said

housing. However, it is obvious to include two if not more electrodes on the housing such that the electrode is on each side of the housing can sense when there is an intrusion or deflection of the housing. It is also obvious the housing or the encasing alone is not able to detect or sense any intrusion so it is necessary to have a sensing or electrode conducting material superimposed onto the encasing to form the "house". It would have been obvious of ordinary skill in the art for Kleijne to have (two or more) electrodes disposed on the housing in order to sense or detect when there is an intrusion or some sort of deflection involving the encasing (sides) of the housing (col.6, line 67 – col.7, line 4).]

As per claim 14: See col.10, lines 51-59; discussing the temperature sensor that sends a temperature signal and that it is inherent the signal is being sent and processed by the processor to indicate a detection of deflection of the housing.

As per claim 15: See col.11, lines 45 – col.12, line 67; discussing adjusting the deflection based upon the deflection signal.

As per claim 16: See col.2, lines 13-17 and col.9, lines 26-28; discussing confidential data.

As per claim 17: See col.10, lines 13-63 and col.12, lines 19-67; discussing erasing the confidential data when the determined deflection exceeds the predetermined range.

As per claim 18: See col.9, lines 8-28; discussing a data management processor that manages data stored on the data storage and further determines the deflection of said housing and a main processor that controls said data management processor.

As per claim 19: See col.10, lines 13-63 and col.12, lines 19-29; discussing responsive to a deflection that exceeds the predetermined reference value to destroy the data.

As per claim 20: See col.10, lines 13-67 and col.11, line 45 – col.12, line 16; discussing the deflection based upon a change in capacitance between the plurality of electrodes.

Examiner's Comments

Kleijne discloses having six plates forming the housing (col.4, lines 17-19) wherein the conductive path segments and the conductive sheet are superimposed on the inner surface of the plate (col.4, lines 32-34). Although, Kleijne fails to explicitly discuss having two electrodes disposed on said housing, it is obvious to have the electrode on each side or encasing of the housing so that it can sense when there is an intrusion or deflection that surrounds the housing. It is also obvious the housing or the encasing alone is not able to detect or sense any intrusion so it is necessary to have a sensing or

electrode conducting material superimposed onto the encasing to form the "house". It would have been obvious of ordinary skill in the art for Kleijne to have (two or more) electrodes disposed on the housing in order to sense or detect when there is an intrusion or some sort of deflection involving the encasing (sides) of the housing (col.6, line 67 – col.7, line 4).

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to LEYNNA T. HA whose telephone number is (703) 305-3853. The examiner can normally be reached on Monday - Thursday (7:00 - 5:00PM).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kim Vu can be reached on (703) 305-4393. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

***TC 2100 will be moved to Carlyle in October 2004. At this time, any inquiry or communications should be directed to the examiner, LEYNNA HA, whose new telephone number is (571) 272-3851 and the new telephone number for TC 2100 receptionist is 571-272-2100.

LHa

/KIM VU
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